

# Space Science Investigation: NASA ISS Stowage Simulator

*IGOAL - Integrated, Graphics, Operations and Analysis Laboratory*

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## **GARY'S ABSTRACT**

During this internship the opportunity was granted to work with the Integrated, Graphics, Operations and Analysis Laboratory (IGOAL) team. The main assignment was to create 12 achievement patches for the Space Station training simulator called the "NASA ISS Stowage Training Game." This project was built using previous IGOAL developed software.

To accomplish this task, Adobe Photoshop and Adobe Illustrator were used to craft the badges and other elements required. Blender, a 3D modeling software, was used to make the required 3D elements. Blender was a useful tool to make things such as a CTB bag for the "No More Bob" patch which shows a gentleman kicking a CTB bag into the distance. It was also used to pose characters to the positions that was optimal for their patches as in the "Station Sanitation" patch which portrays an astronaut waving on a U.S module on a truck.

Adobe Illustrator was the main piece of software for this task. It was used to craft the badges and upload them when they were completed. The style of the badges were flat, meaning that they shouldn't look three dimensional in any way, shape or form. Adobe Photoshop was used when any pictures need brightening and was where the texture for the CTB bag was made.

In order for the patches to be ready for the game's next major release, they have to go under some critical reviewing, revising and re-editing to make sure the other artists and the rest of the staff are satisfied with the final products. Many patches were created and revamped to meet the flat setting and incorporate suggestions from the IGOAL team. After the three processes were completed, the badges were implemented into the game (reference fig1 for badges).

After a month of designing badges, the finished products were placed into the final game build via the programmers. The art was the final piece in showcasing the latest build to the public for testing. Comments from the testers were often exceptional and the feedback on the badges were outstanding. The latest build will also be tested by astronauts to determine if the product could potentially be incorporated into the astronaut training program.

This experience has provided the opportunity to experience the feeling of working with research and development organization. The art skills and programming skills received at the internship will provide and maintain a strong foundation for a career in computer programming and digital media.



*Gamer*

Figure 1